



a,h
template<class T> T max(T a,T b)
{
 return a > b ? a : b;
}

FIG. 11A

f1.cpp
#include "a,h"
void func 1 ()
{
 ...
322 i=max<int> (1, 3);
 ...
}
void func 2 ()
{
 ...
323 j=max<int> (4, 3);
 ...
}

FIG. 11B

f2.cpp
#include "a,h"
void func 3 ()
{
 ...
324 k=max<int>(1, 10);
 ...
}

FIG. 11C

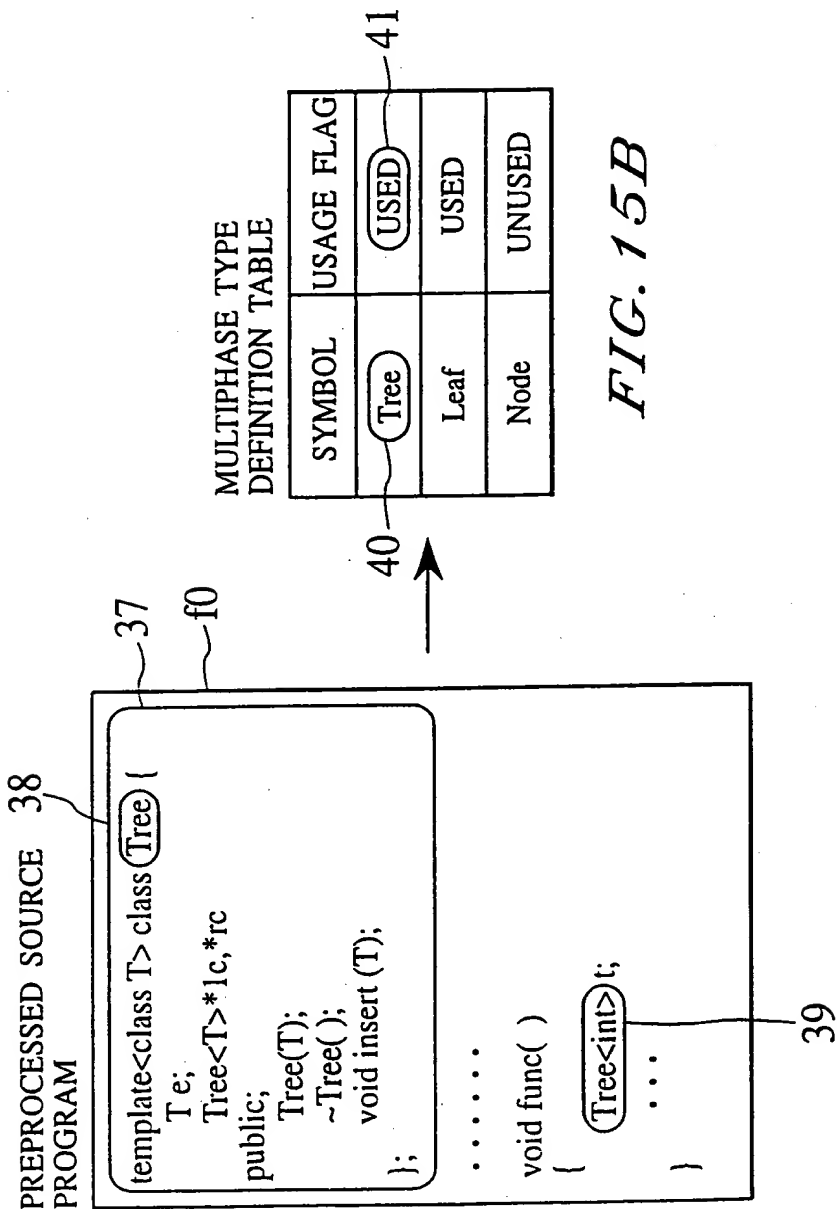


FIG. 15B

FIG. 15A

FIG. 21A

PREPROCESSED SOURCE FILE

```

template<class T> class Stream {
public;
    T & add_info(T &);
    void add_list(T &,int);
    void add_cell(T &);
    void add_alist(T &,int);
}
...

void func 2 ( )
{
    stream<int> s;
    stream<double> t;
    ...
    s.add_list (s.add_info(s) , 3);
}

```

FIG. 21B

OPTIMIZED SOURCE PROGRAM

```

class Stream_int {
public ;
    int add_info(int&);
    void add_list(int&,int);
}

class Stream_double {
public ;
    void add_alist(double&,int);
}
...

void func 2 ( )
{
    stream_int s;
    stream_double t;
    ...
    s.add_list (s.add_info(s) , 3);
}

```

MULTIPHASE TYPE DEFINITION TABLE
(MEMBER FUNCTION INFORMATION)

SYMBOL	USAGE FLAG
Stream<int>::add_info	USED
Stream<int>::add_list	USED
Stream<int>::add_cell	UNUSED
Stream<int>::add_alist	UNUSED
Stream<int>::add_info	UNUSED
Stream<int>::add_list	UNUSED
Stream<int>::add_cell	UNUSED
Stream<int>::add_alist	USED

FIG. 21C